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10/780,747	02/19/2004	Toshihiko Muramatsu	0073/015001	1781
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SMITH PATENT OFFICE			ADDY, ANTHONY S	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/780,747

**Applicant(s)**

MURAMATSU, TOSHIHIKO

**Examiner**

Anthony S. Addy

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/04/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to applicant's amendment filed on July 25, 2007.

**Claims 1-18** are pending in the present application.

### *Information Disclosure Statement*

2. The references listed in the Information Disclosure Statement filed on October 04, 2007 have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

### *Response to Arguments*

3. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shimada, U.S. Publication Number 2002/0152025 A1 (hereinafter Shimada)** and further in view of **Akashi, U.S. Patent Number 6,810,327 (hereinafter Akashi)**.

Regarding claims 1, 3 and 4, Shimada teaches a mobile terminal device (e.g. *mobile unit navigation system*) having a route guiding function of guiding along a route by obtaining map information from a server system via a radio communication network (see p. 1 [0009], p. 6 [0142] and Fig. 2), comprising: a position detecting unit (e.g.

*position detection means 10) which detects a current position of the mobile terminal device (see p. 3 [0057-0058] and Fig. 1; shows a position detection means 10); a bearing detecting unit (e.g. bearing sensor 11) which detects a first bearing to which the mobile terminal device is directed (see p. 3 [0058] and Fig. 2; wherein Numeral 11 denotes a bearing sensor of a gyro, a geomagnetic sensor, etc., which reads on a bearing detecting unit which detects a first bearing to which the mobile terminal device is directed ); a map information acquiring unit (e.g. map information acquiring means 20) which transmits predetermined specific information to identify a destination and positional information of the current position to the server system, and acquires map information on a section containing the destination and the current position from the server system (see p. 1 [0009], p. 3 [0058], p. 6 [0142] and Fig. 2); and a displaying unit (e.g. display monitor 51) which displays a map based on the map information acquired from said map information acquiring unit, displays predetermined icon images at a position of the destination and the current position respectively, and displays an icon image indicating the first bearing (see p. 3 [0058 & 0060] and Fig. 2; wherein Numeral 51 denotes a display monitor for displaying the found route guide as a map image).*

Although, Shimada fails to explicitly teach a target bearing calculating unit which calculates a second bearing from a current position to the destination based on the positional information and the predetermined specific information; a judging unit that judges whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and a target capturing unit which produces different sound effects in response to result of

the judging unit., one of ordinary skill in the art recognizes that Shimada's teaching of a bearing sensor of a gyro, a geomagnetic sensor, etc., which detects a bearing to which the mobile terminal device is directed from a current position of the mobile terminal (see p. 3 [0058], p. 4 [0074] and Fig. 2) broadly reads on a target bearing calculating unit which calculates a second bearing from a current position to the destination based on the positional information and the predetermined specific information.

In an analogous field of endeavor, Akashi teaches a navigation apparatus including a route searching unit for searching for a route from a current position of a moving object to a destination, wherein a judging unit judges whether a difference between a first bearing and a second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and a target capturing unit (*e.g. guidance data generation unit*) which produces different sound effects in response to result of the judging unit (see col. 8, lines 5-30 & 57-62, col. 9, lines 10-12, col. 10, line 23 through col. 11, line 9 and Fig. 7; steps 607 & 610).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada with the teachings of Akashi to include a judging unit that judges whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and a target capturing unit which produces different sound effects in response to result of the judging unit, in order to provide an advantage to easily provide area information including information about a location of each of a plurality of areas lying along roads

that intersect at a certain intersection that is a target for guidance as taught by Akashi (see col. 2, lines 2-14).

Regarding claims 2 and 5, Shimada in view of Akashi teaches all the limitations of claims 1 and 4. Shimada in view of Akashi further teaches a mobile terminal device having a route guiding function, wherein the target capturing unit produces different melodies in response to the result of the judging unit (see *Akashi*, col. 8, lines 57-62, col. 9, lines 50-55, col. 10, line 64 through col. 11, line 9 and Fig. 7; step 610).

Regarding claims 6 and 7, Shimada teaches a route guiding method utilizing a mobile terminal device (*e.g. mobile unit navigation system*) including a position detecting unit (*e.g. position detection means 10*) for detecting a current position of the mobile terminal device (see p. 3 [0057-0058] and Fig. 1; *shows a position detection means 10*) and a bearing detecting unit (*e.g. bearing sensor 11*) for detecting a first bearing to which the mobile terminal device is directed to the mobile terminal device (see p. 3 [0058] and Fig. 2; *wherein Numeral 11 denotes a bearing sensor of a gyro, a geomagnetic sensor, etc., which reads on a bearing detecting unit which detects a first bearing to which the mobile terminal device is directed*), and a server system (*e.g. an external server system*), to which the mobile terminal device is connected via a radio communication network and which stores a map database including map information including map image data and information to identify a position on a map (see p. 1 [0009] and p. 6 [0142]), the method comprising the steps of: causing the server system to execute the steps of, searching the map information containing a destination and the current position from the map database based on positional information of the current

position and specific information of the destination which are transmitted from the mobile terminal device (see p. 3 [0058, 0060] and p. 6 [0142]), and sending the map information obtained in said step of searching the map information to the mobile terminal device; and causing the mobile terminal device to execute the steps of, transmitting specific information designated by a user to the server system, transmitting the positional information of the current position detected by the position detecting unit to the server system, receiving the map information sent from the server system (see p. 3 [0058, 0060] and p. 6 [0142]), displaying a map based on the map information acquired in said step of searching the map information, displaying predetermined icon images to overlap with a position of the destination and the current position, and displaying an icon image indicating the first bearing (see p. 3 [0058 & 0060] and p. 7 [0147]).

Although, Shimada fails to explicitly teach calculating a second bearing from the current position to the destination based on the positional information and the specific information, judging whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and producing different sound effects in response to a result of said step of judging, one of ordinary skill in the art recognizes that Shimada's teaching of a bearing sensor of a gyro, a geomagnetic sensor, etc., which detects a bearing to which the mobile terminal device is directed from a current position of the mobile terminal (see p. 3 [0058], p. 4 [0074] and Fig. 2) broadly reads on calculating a second

bearing from the current position to the destination based on the positional information and the specific information.

In an analogous field of endeavor, Akashi teaches a navigation apparatus including a route searching unit for searching for a route from a current position of a moving object to a destination, wherein a judging unit judges whether a difference between a first bearing and a second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and a target capturing unit (*e.g. guidance data generation unit*) which produces different sound effects in response to result of the judging unit (see col. 8, lines 5-30 & 57-62, col. 9, lines 10-12, col. 10, line 23 through col. 11, line 9 and Fig. 7; steps 607 & 610).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada with the teachings of Akashi to include a method of judging whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and producing different sound effects in response to a result of said step of judging, in order to provide an advantage to easily provide area information including information about a location of each of a plurality of areas lying along roads that intersect at a certain intersection that is a target for guidance as taught by Akashi (see col. 2, lines 2-14).

Regarding claims 8 and 9, Shimada teaches a computer readable recording medium storing a program for guiding along a route with utilizing a mobile terminal device (*e.g. mobile unit navigation system*) including a position detecting unit (*e.g. position detection means 10*) for detecting a current position of the mobile terminal



device (see p. 3 [0057-0058] and Fig. 1; *shows a position detection means 10*) and a bearing detecting unit (e.g. *bearing sensor 11*) for detecting a first bearing to which the mobile terminal device is directed to the mobile terminal device (see p. 3 [0058] and Fig. 2; *wherein Numeral 11 denotes a bearing sensor of a gyro, a geomagnetic sensor, etc., which reads on a bearing detecting unit which detects a first bearing to which the mobile terminal device is directed*), and a server system (e.g. *an external server system*), to which the mobile terminal device is connected via a radio communication network and which stores a map database including map information including map image data and information to identify a position on a map (see p. 1 [0009] and p. 6 [0142]), wherein the program causes the server system to execute the steps of, searching the map information containing a destination and the current position from the map database, based on positional information of the current position and specific information of the destination which are transmitted from the mobile terminal device, and sending the map information obtained in said step of searching the map information to the mobile terminal device (see p. 3 [0058, 0060] and p. 6 [0142]), and the program causes the mobile terminal device to execute the steps of, transmitting the specific information designated by a user to the server system, transmitting the positional information of the current position detected by the position detecting unit to the server system, receiving the map information sent from the server system (see p. 3 [0058, 0060] and p. 6 [0142]), displaying a map based on the map information acquired in said step of searching the map information, displaying a predetermined icon image at the current

position, and displaying an icon image indicating the first bearing and an icon image indicating the second bearing (see p. 3 [0058 & 0060] and p. 7 [0147]).

Although, Shimada fails to explicitly teach calculating a second bearing from the current position to the destination based on the positional information and the specific information, judging whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and producing different sound effects in response to a result of said step of judging, one of ordinary skill in the art recognizes that Shimada's teaching of a bearing sensor of a gyro, a geomagnetic sensor, etc., which detects a bearing to which the mobile terminal device is directed from a current position of the mobile terminal (see p. 3 [0058], p. 4 [0074] and Fig. 2) broadly reads on calculating a second bearing from the current position to the destination based on the positional information and the specific information.

In an analogous field of endeavor, Akashi teaches a navigation apparatus including a route searching unit for searching for a route from a current position of a moving object to a destination, wherein a judging unit judges whether a difference between a first bearing and a second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and a target capturing unit (*e.g. guidance data generation unit*) which produces different sound effects in response to result of the judging unit (see col. 8, lines 5-30 & 57-62, col. 9, lines 10-12, col. 10, line 23 through col. 11, line 9 and Fig. 7; steps 607 & 610).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada with the teachings of Akashi to include a method of judging whether a difference between the first bearing and the second bearing is less than or greater than a predetermined value, or is equal to the predetermined value; and producing different sound effects in response to a result of said step of judging, in order to provide an advantage to easily provide area information including information about a location of each of a plurality of areas lying along roads that intersect at a certain intersection that is a target for guidance as taught by Akashi (see col. 2, lines 2-14).

Regarding claims 10, 11, 12 and 13, Shimada in view of Akashi teaches all the limitations of claims 1, 4, 6 and 8. Shimada in view of Akashi further teaches a mobile terminal device having a route guiding function, further comprising a relative bearing calculating unit which calculates the difference between the first bearing and the second bearing (see *Akashi*, col. 8, lines 5-30, col. 10, line 23 through col. 11, line 9 and Fig. 7; step 607).

Regarding claim 15, Shimada in view of Akashi teaches all the limitations of claim 10. Shimada in view of Akashi further teaches a mobile terminal device having a route guiding function, further comprising means for displaying another icon image indicating the second bearing on said display unit (see *Akashi*, col. 8, line 60 through col. 9, line 10 and Fig. 8).

6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shimada, U.S. Publication Number 2002/0152025 A1 (hereinafter Shimada)** and **Akashi, U.S. Patent Number 6,810,327 (hereinafter Akashi)** as applied to claims

1 and 4 above, and further in view of **Wilson et al., U.S. Patent Number 6,480,148 (hereinafter Wilson)**.

Regarding claims 17 and 18, Shimada in view of Akashi teaches all the limitations of claims 1 and 4. Shimada in view of Akashi further teaches a mobile terminal device having a route guiding function, wherein the position information of the current position is indicated by a latitude A of the current position and a longitude B of the current position, and the predetermined specific information to identify a destination is indicated by a latitude C of the destination and a longitude D of the destination (see Akashi, col. 9, lines 1-10 and Fig. 8), but fails to explicitly teach wherein the second bearing is calculated by a formula:  $\theta = \arctan \left( \frac{\text{latitude C} - \text{latitude A}}{\text{longitude D} - \text{longitude B}} \right)$ .

In an analogous field of endeavor, Wilson teaches a method and apparatus for navigation guidance, wherein a bearing is calculated by a formula:  $\theta = \arctan \left( \frac{\text{latitude C} - \text{latitude A}}{\text{longitude D} - \text{longitude B}} \right)$  (see col. 8, line 40-64).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Shimada and Akashi with the teachings of Wilson, wherein the second bearing is calculated by a formula:  $\theta = \arctan \left( \frac{\text{latitude C} - \text{latitude A}}{\text{longitude D} - \text{longitude B}} \right)$ , in order to determine with a high level of accuracy a direction to a desired destination or position to the user of the navigation guidance system as taught by Wilson (see col. 2, lines 44-54).

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S. Addy whose telephone number is 571-272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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